

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An apparatus for controlling the communication loads placed upon a human user by a computer system, the computer system comprising a plurality of information management systems, each of the information management systems being operable to assist and communicate with the human user, the apparatus comprising:

- (i) receiving means for receiving at least one input from a human user, representative of at least one task of a first type to be performed by the information management system and for receiving information resulting from the performance of said at least one task of said first type from the information management system;
- (ii) generating means for generating a task of a second type for communicating the received information to the human user;
- (iii) scheduling means for;
 - a) receiving a user workload input representative of user workload identifying the human user's current and future activities;and

b) scheduling an execution time for said at least one task of a second type for communicating the received information to the human user so as to avoid the user's current and future activities identified by the user workload input;

wherein, when the input comprises a change to a previously received input, the scheduling means is operable to change the execution time associated with the previously received input, thereby rescheduling communication of the information associated with the previously received input.

2. Cancelled.

3. (Currently Amended) ~~An apparatus according to claim 1,~~ for controlling the communication loads placed upon a human user by a computer system, the computer system comprising a plurality of information management systems, each of the information management systems being operable to assist and communicate with the human user, the apparatus comprising:

(i) receiving means for receiving at least one input from a human user, representative of at least one task of a first type to be performed by the information management system and for receiving information resulting from the performance of said at least one task of said first type from the information management system;

(ii) generating means for generating a task of a second type for communicating the received information to the human user;

(iii) scheduling means for:

a) receiving a user workload input representative to user workload identifying the human user's current and future activities; and

b) scheduling an execution time for said at least one task of a second type for communicating the received information to the human user so as to avoid the user's current and future activities identified by the user workload input;

wherein the apparatus further includes a world model, which world model comprises at least one parameter associated with each input, and is accessible to the scheduling means.

4. (Previously Presented) An apparatus according to claim 3, wherein the parameters include at least one of a start time of each task, a deadline time of each task, a duration of the or each task and/or interruption status of the human user.

5. (Previously Presented) An apparatus according to claim 4, wherein an entity can explicitly specify the interruption status for allowing or not allowing interruptions to the human user.

6. (Previously Presented) An apparatus according to claim 1, including means for storing human user preference information, which user preference information includes preferred actions of the human user relating to task information.

7. (Previously Presented) An apparatus according to claim 3, wherein the world model is maintained by a diary, which diary is responsive to inputs from the execution means and schedules execution of the said task to occur in a free timeslot of the diary.

8. (Currently Amended) An apparatus for assisting in the management of information flows for a human user ~~according to claim 1 comprising further~~ for controlling the communication loads placed upon a human user by a computer system, the computer system comprising a plurality of information management systems, each of the information management systems being operable to assist and communicate with the human user, the apparatus comprising:

- (i) receiving means for receiving at least one input from a human user, representative of at least one task of a first type to be performed by the information management system and for receiving information resulting from the performance of said at least one task of said first type from the information management system;

(ii) generating means for generating a task of a second type for communicating the received information to the human user;

(iii) scheduling means for:

a) receiving a user workload input representative to user workload identifying the human user's current and future activities; and

b) scheduling an execution time for said at least one task of a second type for communicating the received information to the human user so as to avoid the user's current and future activities identified by the user workload input; and

means operable to concurrently execute a plurality of processes.

9. (Previously Presented) An apparatus according to claim 1, wherein the information management systems include at least one of a diary assistant, an email assistant, a telephone assistant and a web assistant.

10. (Currently Amended) ~~An apparatus according to claim 1, further comprising~~ for controlling the communication loads placed upon a human user by a computer system, the computer system comprising a plurality of information management systems, each of the information management systems being operable to assist and communicate with the human user, the apparatus comprising:

- (i) receiving means for receiving at least one input from a human user, representative of at least one task of a first type to be performed by the information management system and for receiving information resulting from the performance of said at least one task of said first type from the information management system;
- (ii) generating means for generating a task of a second type for communicating the received information to the human user;
- (iii) scheduling means for:
 - a) receiving a user workload input representative to user workload identifying the human user's current and future activities; and
 - b) scheduling an execution time for said at least one task of a second type for communicating the received information to the human user so as to avoid the user's current and future activities identified by the user workload input; and

means responsive to an input signal indicative of a state of mind of a human user, wherein the scheduling means is further arranged to schedule an execution time for a task in dependence on the received input.

11. Cancelled.

12. (Currently Amended) An apparatus according to claim 1, for controlling the communication loads placed upon a human user by a computer system, the computer system comprising a plurality of information management systems, each of the information management systems being operable to assist and communicate with the human user, the apparatus comprising:

- (i) receiving means for receiving at least one input from a human user, representative of at least one task of a first type to be performed by the information management system and for receiving information resulting from the performance of said at least one task of said first type from the information management system;
- (ii) generating means for generating a task of a second type for communicating the received information to the human user;
- (iii) scheduling means for:
 - a) receiving a user workload input representative to user workload identifying the human user's current and future activities; and
 - b) scheduling an execution time for said at least one task of a second type for communicating the received information to the human user so as to avoid the user's current and future activities identified by the user workload input; and

wherein the receiving means (i) is further operable to receive the input indicative of an interruption status for the user.

13-15. Cancelled.

16. (Currently Amended) ~~A method embodied as~~a tangible storage medium containing a computer program, or a suite of computer programs, comprising a set of instructions, or a suite of a set of instructions, to cause a computer to perform the a method according to claim 17, of controlling the communication loads placed upon a human user by a computer system, the computer system comprising a plurality of information management systems, each of the information management systems being operable to assist and communicate with the human user, the apparatus comprising:

- (i) receiving at least one input from a human user representative of at least one task of a first type to be performed by the information management system;
- (ii) receiving information resulting from the performance of said at least one task of the first type from the information management system;
- (iii) generating a task of a second type for communicating the received information to the human user;
- (iv) receiving a user workload input representative of user workload identifying the human user's current and future activities; and

- (v) scheduling an execution time for said at least one task of a second type for communicating the received information to the human user so as to avoid the human user's current and future activities identified by the user workload input;

wherein, when the input comprises a change to a previously received input, the scheduling step changes the execution time associated with the previously received input, thereby rescheduling communication of the information associated with the previously received input.

17. (Currently Amended) A method of controlling the communication load placed upon a human user by a computer system, the computer system comprising a plurality of information management systems, each of the information management systems being operable to assist and communicate with the human user, the method comprising:

- (i) receiving at least one input from a human user representative of at least one task of a first type to be performed by the information management system;
- (ii) receiving information resulting from the performance of said at least one task of the first type from the information management system;
- (iii) generating a task of a second type for communicating the received information to the human user;

(iv) receiving a user workload input representative of user workload identifying the human user's current and future activities; and

(v) scheduling an execution time for said at least one task of a second type for communicating the received information to the human user so as to avoid the human user's current and future activities identified by the user workload input;

wherein, when the input comprises a change to a previously received input, the scheduling step changes the execution time associated with the previously received input, thereby rescheduling communication of the information associated with the previously received input.

18. (Previously Presented) A method according to claim 17 further including the step of enabling the information management systems to perform the task of a second type at the scheduled execution time.

19. Cancelled.

20. (Currently Amended) A method of controlling a computer information system interface with a human user so as to control the user's communication load, said method comprising:

accepting a user's input request to the computer information system for information to be returned to that user; and

automatically scheduling delivery of the requested information to said user at a time that avoids interfering activities as identified in a schedule of activities for said user that is maintained by said computer information system;

wherein, when the input comprises a change to a previously received input, the scheduling step changes the execution time associated with the previously received input, thereby rescheduling communication of the information associated with the previously received input.

21. (New) An apparatus according to claim 1, wherein the apparatus further includes a world model, which world model comprises at least one parameter associated with each input, and is accessible to the scheduling means.

22. (New) An apparatus according to claim 21 wherein the parameters include at least one of a start time of each task, a deadline time of each task, a duration of the or each task and/or interruption status of the human user.

23. (New) An apparatus according to claim 11 wherein an entity can explicitly specify the interruption status for allowing or not allowing interruptions to the human user.

24. (New) An apparatus according to claim 1, including means for storing human user preference information, which user preference information includes preferred actions of the human user relating to task information.

25. (New) An apparatus according to claim 21 wherein the world model is maintained by a diary, which diary is responsive to inputs from the execution means and schedules execution of the said task to occur in a free timeslot of the diary.

26. (New) An apparatus for assisting in the management of information flows for a human user according to claim 1 comprising further means operable to concurrently execute a plurality of processes.

27. (New) An apparatus according to claim 1, wherein the information management systems include at least one of a diary assistant, an email assistant, a telephone assistant and a web assistant.

28. (New) An apparatus according to claim 1, further comprising means responsive to an input signal indicative of a state of mind of a human user, wherein the scheduling means is further arranged to schedule an execution time for a task in dependence on the received input.

29. (New) An apparatus according to claim 1, wherein the receiving means (i) is further operable to receive the input indicative of an interruption status for the user.